

Serial No.: 10/596,118

Filing Date: 5/31/2006

Attorney Docket No. 515.040US01

Title: TEST APPARATUS FOR CONTROL UNIT, PATTERN SIGNAL CREATING APPARATUS, AND TEST PROGRAM GENERATING APPARATUS

---

**REMARKS**

The Final Office Action mailed on December 18, 2009 has been reviewed. Claims 10 and 20 are pending in this application. Claims 1-9 and 11-19 are canceled.

**Rejections Under 35 U.S.C. § 103**

Claims 10, 20 were rejected under 35 USC § 103(a) as being unpatentable over Hoenninger (U.S. Patent No. 5,490,065) (hereafter *Hoenninger*) in view of Chapman et al. (U.S. Patent No. 5,442,738) (hereafter *Chapman*). Applicant respectfully traverses.

Claims 10 and 20 are amended to include “as a result of the execution of the first pattern signal.” These amendments are supported in at least Figures 14 and 15, and page 14, line 29 - page 15, line 6.

On page 3 of the Office Action, the Examiner notes that:

Hoenninger discloses conditions for transitioning to different pattern signals, namely first *from initializing signals* (Col. 3, lines 40-60) *to a set of input signals* generated by the signal generators (Col. 3, line 67, Col. 4, lines 1-15) *provided that a successful communication* between the control unit and testing computer *is made in the initialization* step. Afterwards, transition from signal generated input signals to *square wave signals* (Col. 4, lines 28-35) is made provided *the test program recognizes a falling edge signal* on the ignition signal output line 17 (Col. 4, lines 21-28).

In *Hoenninger*, the transition from initializing signals to the set of input signals is based on a successful communication. The next transition to square wave signals is based on recognizing a falling edge in an output signal. This is not:

causing said testing means during execution of said first pattern signal to switch to the execution of a third pattern signal when a second pattern signal transition condition for making a transition to the execution of said third pattern signal holds *as a result of the execution of the first pattern signal*,

Serial No.: 10/596,118

Filing Date: 5/31/2006

Attorney Docket No. 515.040US01

Title: TEST APPARATUS FOR CONTROL UNIT, PATTERN SIGNAL CREATING APPARATUS, AND TEST PROGRAM GENERATING APPARATUS

---

as claimed in claim 10. Likewise, this is not

switching, during execution of said first pattern signal, to the execution of a third pattern signal when a second pattern signal transition condition for making a transition to the execution of said third pattern signal holds as a result of the execution of the first pattern signal,

as claimed in claim 20.

The Examiner acknowledges that

Hoenninger does not disclose means for causing said testing means during execution of said first pattern signal to switch to the execution of a third pattern signal when a second pattern signal transition condition for making a transition to the execution of said third pattern signal holds.

On page 4 of the Office Action, the Examiner alleges that claims 10 and 20 are obvious over *Hoenninger* in view of disclosure by *Chapman* of a:

computer display with various nested windows configuration (Figs. 3-6), which allows the structural relationships between the objects (Abstract, lines 2-5) to be represented in a way that is visually easy to comprehend (Col. 4, lines 28-30).

...it would have been obvious to a person of ordinary skill in the art to use the teaching of Chapman in the apparatus and method of Hoenninger to organize the pattern signal testing structures that is [*sic*] user-friendly, visually easy to comprehend, edit and read as taught by Chapman, wherein the said organization would consist of having means for causing and testing means during execution of said first pattern signal to switch to the execution of a third pattern signal when a second pattern signal transition condition for making a transition to the execution of said third pattern signal holds.

As an initial matter, *Chapman* provides no teaching about determining when to switch from one test signal pattern to another test signal pattern. *Chapman* is entirely devoid of any teaching related to detecting or controlling such transitions and thus, one of ordinary skill in the art would not be able to modify *Hoenninger* as suggested by the Examiner to

Serial No.: 10/596,118

Filing Date: 5/31/2006

Attorney Docket No. 515.040US01

Title: TEST APPARATUS FOR CONTROL UNIT, PATTERN SIGNAL CREATING APPARATUS, AND TEST PROGRAM GENERATING APPARATUS

---

produce the claimed invention. The structural relationships between the objects that are represented in a way that is visually easy to comprehend as disclosed by *Chapman* do not explain what to do if a “second pattern signal transition condition” results from the “execution of said first pattern signal.” *Chapman* does not disclose a structural relationship or configuration in which (1) a first pattern signal transition condition causes a transition to the execution of a second pattern signal and/or (2) a second pattern signal transition condition causes a transition to the execution of a third pattern signal.

Thus, *Chapman* does not disclose:

means for causing said testing means during execution of said first pattern signal to switch to the execution of a third pattern signal when a second pattern signal transition condition for making a transition to the execution of said third pattern signal holds as a result of the execution of the first pattern signal,

as claimed in claim 10. Likewise, *Chapman* does not disclose

a step for switching, during execution of said first pattern signal, to the execution of a third pattern signal when a second pattern signal transition condition for making a transition to the execution of said third pattern signal holds as a result of the execution of the first pattern signal,

as claimed in claim 20.

Thus, there is no teaching or suggestion in *Hoenninger* or *Chapman*, either alone or in combination, of

means for causing said testing means during execution of said first pattern signal to switch to the execution of a third pattern signal when a second pattern signal transition condition for making a transition to the execution of said third pattern signal holds as a result of the execution of the first pattern signal

as claimed in claim 10. Likewise, there is no teaching or suggestion in *Hoenninger* or *Chapman*, either alone or in combination, of

Serial No.: 10/596,118

Filing Date: 5/31/2006

Attorney Docket No. 515.040US01

Title: TEST APPARATUS FOR CONTROL UNIT, PATTERN SIGNAL CREATING  
APPARATUS, AND TEST PROGRAM GENERATING APPARATUS

---

a step for switching, during execution of said first pattern signal, to the execution of a third pattern signal when a second pattern signal transition condition for making a transition to the execution of said third pattern signal holds as a result of the execution of the first pattern signal

as claimed in claim 20.

Therefore, the rejection is improper.

Furthermore, the Applicant believes that the obviousness rejection is improper, because *Chapman* relied on by the Examiner is non-analogous art that cannot be applied against the claims of the present application in an obviousness rejection. *Hoenninger* is related to a method for testing control units and to an apparatus for carrying out the method. *Chapman* is related to a computer display and a method for the presentation of structure. One skilled in the art of the present invention would not consider combining *Chapman* with *Hoenninger*.

For the foregoing reasons, Applicants respectfully request that the rejection of claims 10 and 20 under 35 U.S.C. § 103(a) be withdrawn.

Serial No.: 10/596,118

Filing Date: 5/31/2006

Attorney Docket No. 515.040US01

Title: TEST APPARATUS FOR CONTROL UNIT, PATTERN SIGNAL CREATING  
APPARATUS, AND TEST PROGRAM GENERATING APPARATUS

---

**CONCLUSION**

Applicant respectfully submits that claims **10 and 20** are in condition for allowance and notification to that effect is earnestly requested. If necessary, please charge any additional fees or credit overpayments to Deposit Account No. 502432.

If the Examiner has any questions or concerns regarding this application, please contact the undersigned at the telephone number listed below.

Respectfully submitted,

Date: April 19, 2010

/Barbara Barenburg/

Barbara Barenburg

Reg. No. 56943

Attorneys for Applicant  
Fogg & Powers LLC  
5810 W. 78<sup>th</sup> Street, Ste. 100  
Minneapolis, MN 55439  
T – (952) 465-0770  
F – (952) 465-0771